

22. (Rewritten) An airbag safety restraint system for a vehicle comprising:

an inflatable airbag having an interior,

an inflator assembly having an inflator housing, an ignitable gas generating material contained in said inflator housing and at least one passage extending between said gas generating material and said interior of said airbag such that upon ignition of said gas generating material, gas is generated and flows through said at least one passage into said interior of said airbag to inflate said airbag, and

an electronic crash sensor for causing ignition of said gas generating material upon a determination of a crash requiring inflation of said airbag,

said crash sensor comprising

a sensor housing situated exterior of said inflator housing, and

an accelerometer arranged in said sensor housing and including a sensing mass movable relative to said sensor housing in response to accelerations of said sensor housing resulting from the crash, said accelerometer including a piezo-electric element arranged to generate a signal representative of the movement of said sensing mass over time, said crash sensor being arranged to cause ignition of said gas generating material if the movement over time of said sensing mass represented by said signal results in a calculated value which is in excess of a threshold value.

#### REMARKS

Entry of this amendment and reconsideration of the present application, as amended, are respectfully requested.

This amendment should be entered because it amends rejected independent claims to include allowable subject matter, and thus is not believed to reopen prosecution or require further consideration by the Examiner.

Claims 1-17, 19, 21-24 and 26-31 are presently active in this application, claims 18, 20 and 25 (6) having been cancelled.

Claims 16, 19, 21 and 22 are amended in view of the Decision on Appeal.

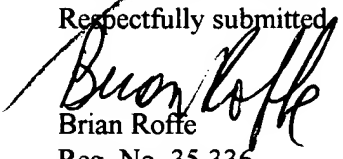
Specifically, in the Decision on Appeal, the Board sustained the rejection of claims 16-19, 21-24, 26 and 27. However, claims 20 and 25 were objected to as being dependent on a rejected base claim but would be allowable if rewritten in independent form including all of the limitations of any intervening claims.

In this amendment, independent claim 16 has been amended to include the subject matter of claims 18 and 20 and independent claim 22 as been amended to include the subject matter of claim 25. In view of the Examiner's indication of allowable subject matter in claims 20 and 25, claims 16 and 22 as amended include allowable subject matter and thus should be allowed.

In view of the foregoing, it is respectfully submitted that the present application is now in condition for allowance.

An early and favorable action on the merits upon entry and consideration of this amendment is earnestly solicited.

FOR THE APPLICANT  
Respectfully submitted,

  
Brian Roffe  
Reg. No. 35,336

Brian Roffe, Esq.  
366 Longacre Avenue  
Woodmere, New York 11598-2417  
Tel.: (516) 295-1394  
Fax: (516) 295-0318

Encls.

Version with Markings to Show Changes Made



**VERSION WITH MARKINGS TO SHOW CHANGES MADE**

U.S. PATENT APPLICATION SER. NO. 09/114,962

ACCOMPANYING AMENDMENT OF MARCH 18, 2002

**IN THE CLAIMS:**

Please amend claims 16, 19, 21 and 22 as follows.

16. (Amended Three Times) An airbag safety restraint system for a vehicle comprising:

an inflatable airbag having an interior,

an inflator assembly having an inflator housing, an ignitable gas generating material contained in said inflator housing and at least one passage extending between said gas generating material and said interior of said airbag such that upon ignition of said gas generating material, gas is generated and flows through said at least one passage into said interior of said airbag to inflate said airbag, and

an electronic crash sensor for causing ignition of said gas generating material upon a determination of a crash requiring inflation of said airbag,

said crash sensor comprising

a sensor housing situated exterior of said inflator housing,

an accelerometer comprising a sensing mass arranged in said sensor housing to move relative to said sensor housing in response to accelerations of said sensor housing resulting from the crash, said accelerometer including a piezo-electric element for generating a signal representative of the movement of said sensing mass [being generated], and

a micro-processor comprising an algorithm for determining whether the movement of said sensing mass over time results in a calculated value which is in excess of a threshold value based on the signal such that if the movement over time of said sensing mass results in a calculated value which is in excess of the threshold value, said micro-processor causes ignition of gas generating material and thus inflation of said airbag.

19. (Amended) The system of claim [18] 16, wherein the sensing mass is a micro-machined element.

21. (Twice Amended) The system of claim [18] 16, wherein said inflator assembly further comprises a primer arranged in said inflator housing for igniting said gas generating material, said crash sensor including an electronic circuit including said accelerometer and said primer such that upon movement of said sensing mass over time resulting in a calculated value in excess of the threshold value, the electronic circuit is completed thereby causing ignition of said primer.

22. (Amended Three Times) An airbag safety restraint system for a vehicle comprising:

an inflatable airbag having an interior,

an inflator assembly having an inflator housing, an ignitable gas generating material contained in said inflator housing and at least one passage extending between said gas generating material and said interior of said airbag such that upon ignition of said gas generating material, gas is generated and flows through said at least one passage into said interior of said airbag to inflate said airbag, and

an electronic crash sensor for causing ignition of said gas generating material upon a determination of a crash requiring inflation of said airbag,

said crash sensor comprising

a sensor housing situated exterior of said inflator housing, and

an accelerometer arranged in said sensor housing and including a sensing mass movable relative to said sensor housing in response to accelerations of said sensor housing resulting from the crash, said accelerometer [being] including a piezo-electric element arranged to generate a signal representative of the movement of said sensing mass over time, said crash sensor being arranged to cause

ignition of said gas generating material if the movement over time of said sensing mass represented by said signal results in a calculated value which is in excess of a threshold value.